

**REMARKS**

**I. INTRODUCTION**

Claim 12 has been amended. Thus, claims 1-17 remain pending in the present application. No new matter has been added. The amendment to claim 12 is merely to overcome an antecedent basis issue. Thus, Applicants respectfully request that the amendment to claim 12 be entered. In light of the above amendments and the following remarks, Applicants respectfully submit that all presently pending claims are in condition for allowance.

**II. THE 35 U.S.C. § 112 REJECTION SHOULD BE WITHDRAWN**

Claim 12 stand rejected under 35 U.S.C. §112, second paragraph, for being indefinite. In light of the amendment to this claim, the withdrawal of this rejection is respectfully requested.

**III. THE 35 U.S.C. § 103(a) REJECTIONS SHOULD BE WITHDRAWN**

Claims 1-2, 4-8, 10-14, and 17 stand rejected under 35 U.S.C. §103(a) for being obvious over McHugh (U.S. Patent No. 6,230,047) in view of Huish et al. (U.S. Patent No. 5,879,270).

Claim 1 recites, “[a]n audio interval training device, comprising: a sensing unit to obtain a parameter of a user in physical exercise; a memory to store a plurality of audio signals, each having a predetermined tempo value; and a processing unit configured to (1) receive the parameter from the sensing unit, (2) receive a first and second target parameter value, (3) select a first and second audio signals having a respective tempo corresponding to the first and second target parameter values, (4) rendering the first audio signal to the user at least until the processor determines the parameter has achieved the first parameter value, (5) rendering the second audio signal to the user at least until the processor determines the parameter has achieved the second parameter value, and (6) alternating the rendering of the first and second audio signals according to (4) and (5).”

The Examiner asserts that McHugh teaches “using audio signals to encourage a change in the heartbeat of the user to achieve certain parameters.” (See 2/18/09 Office Action, p. 3, ll. 17-18). Specifically, the Examiner asserts that a pulse monitor (20) of McHugh teaches the recitation in claim 1 of “a sensing unit to obtain a parameter of a user in physical exercise.” (See *Id.*). The Examiner also asserts that a processor chip (32) of McHugh teaches the recitation in claim 1 of “a processing unit configured to (1) receive the parameter from the sensing unit.” (See *Id.*). It also appears that the Examiner goes on to assert that the combination of the pulse monitor (20) and the processor chip (32) also teach the recitation in claim 1 of “a processing unit configured to . . . (2) receive a first and second target parameter value.” (See *Id.*). It seems the Examiner has equated “a first and second **target** parameter value” to “a parameter of a user in physical exercise.” As described above, the Examiner refers to pulse monitoring means (20) of McHugh to meet both of these limitations. (See *Id.*). However, it is well known in the art that a pulse monitoring means monitors the user’s current pulse. McHugh never discloses that pulse monitoring means (20) provides a single target pulse rate, yet alone “a first and second target parameter value” as recited in claim 1. Moreover, there is no teaching in McHugh that the processor chip (32) receives any target pulse rate from another source, yet alone “a first and second target parameter value” as recited in claim 1. Accordingly, McHugh fails to disclose or suggest “a processing unit configured to . . . (2) receive a first and second target parameter value” as recited in claim 1.

Furthermore, as conceded by the Examiner, McHugh fails to disclose or suggest “alternating the rendering of the first and second audio signals according to (4) and (5) of claim 1.” (See 2/18/09 Office Action, p. 3, ll. 18-19). In order to cure this deficiency, the Examiner refers to Huish and states that “the processing unit (25, 35) alternates the rendering of the first and second encouragement stimulus (Abstract – raising and lowering elevation of treadmill.” (See *Id.*, p. 4, ll. 3-4). Huish teaches that the load provided by the exercise apparatus is increased/decreased “to the user while the user’s heart rate is simultaneously measured.” (See Huish, col. 1, l. 64-col. 2, l. 3). The increase/decrease of the load is limited by the high/low target heart rates. However, the increase of a load is increasing resistance to a certain movement. The raising and lowering of the elevation of a

treadmill, which the Examiner refers to, increases resistance to the user's motion (running/walking). It is unclear how increasing resistance to a person's motion can possibly meet "*alternating the rendering of the first and second audio signals according to (4) and (5)*," as recited in claim 1. Applicants, therefore, respectfully submit that McHugh and Huish, taken alone or in combination, fail to disclose or suggest "*alternating the rendering of the first and second audio signals according to (4) and (5)*," as recited in claim 1.

Accordingly, Applicants respectfully submit that McHugh and Huish, taken alone or in combination, fail to disclose or suggest "a processing unit configured to . . . (2) receive a first and second target parameter value" and/or "*alternating the rendering of the first and second audio signals according to (4) and (5)*," as recited in claim 1. Thus, it is respectfully submitted that claim 1 is allowable. Because claims 2, 4-8, and 10-11 depend from and, therefore, contain all of the limitations of claim 1, it is respectfully submitted that these claims are also allowable.

Claim 12 recites "receiving a first and second target parameter value" and "alternatively rendering the first audio signal to the user at least until a processor determines the parameter has achieved the first parameter value and the second audio signal to the user at least until the processor determines the parameter has achieved the second parameter value." Thus, for the same reasons as described above with respect to claim 1, it is respectfully submitted that claim 12 is also allowable. Because claims 13-14 and 17 depend from and, therefore, contain all of the limitations of claim 12, it is respectfully submitted that these claims are also allowable.

Claim 3 stands rejected under 35 U.S.C. §103(a) for being obvious over McHugh in view of Huish and further in view of Stubbs et al. (U.S. Patent No. 6,736,759). Claims 9, 15, and 16 stand rejected under 35 U.S.C. §103(a) for being obvious over McHugh in view of Huish and further in view of Curtin (U.S. Patent No. 5,986,200).

It is respectfully submitted that neither Stubbs nor Curtin cure the deficiencies of McHugh and Huish and that McHugh, Huish, Stubbs, and Curtin, taken alone or in any

combination, fail to disclose or suggest the above recitations of claim 1 and 12. Because claims 3 and 9 depend on and, therefore, contain all of the limitations of claim 1, it is respectfully submitted that these claims are allowable. Because claims 15 and 16 depend on and, therefore, contain all of the limitations of claim 12, it is respectfully submitted that these claims are allowable.

**CONCLUSION**

In light of the foregoing, Applicants respectfully submit that all of the presently pending claims are in condition for allowance. All issues raised by the Examiner having been addressed, an early and favorable action on the merits is earnestly solicited.

Respectfully submitted,

By:   
Michael Marcin (Reg. No. 48,198)

Fay Kaplun & Marcin, LLP  
150 Broadway, Suite 702  
New York, NY 10038  
Phone: 212-619-6000  
Fax: 212-619-0276